



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PETITION TO EXPUNGE ASSIGNMENT RECORD

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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OFFICE OF PETITIONS

Sir:

Pursuant to 37 CFR 1.181 and MPEP 323.01(d), Lonza Group, AG (hereinafter "Petitioner"), petitions that the record of the following document be expunged from the Assignment Records of the USPTO:

Patent Security Agreement dated May 5, 2006
Parties: PharmAthene, Inc.
MPM BioVentures III-QP, L.P.
Recorded at: Reel 018132, Frames 0116-0124
Record date: August 1, 2006

Background

1. Petitioner is the owner of the entire right, title and interest in and to the following United States Patents (hereinafter "the eight Lonza Patents"):

5,122,464
5,591,639
5,658,759
5,770,359
5,827,739
5,879,936
5,891,693
5,981,216

2. On August 23, 2005, Lonza Biologics plc ("Biologics"), a wholly-owned subsidiary of Petitioner, granted PharmAthene, Inc. ("PharmAthene") a non-exclusive license under certain patents, including the above-listed eight Lonza Patents. A copy of the License Agreement, with non-relevant parts redacted, is attached hereto as Exhibit A.
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3. On May 5, 2006, PharmAthene executed a Patent Security Agreement, granting to MPM BioVentures III-QP, L.P. ("MPM") a security interest in certain United States patents and

patent applications referred to in the attached Schedule I. Schedule I includes, inter alia, the eight Lonza Patents. A copy of the Patent Security Agreement is attached hereto as Exhibit B.

4. The Patent Security Agreement between PharmAthene and MPM was recorded in the Assignment Records of the USPTO on August 1, 2006, at Reel 018132, Frames 0116-0124. A copy of the Cover Sheet is attached hereto as Exhibit C.

Discussion

The License Agreement between Biologics and PharmAthene (Exhibit A) contains the following provisions relevant to this petition:

1. Paragraph 1.9 provides that "Patent Rights" means the patents and applications set out in Schedule 1. The U.S. patents set out in Schedule 1 are the eight Lonza Patents.
2. Paragraph 3.1 provides that "It is hereby acknowledged and agreed that as between the parties any and all property and Intellectual Property in the System is vested in Biologics." "Intellectual Property" is defined in paragraph 1.6 as "System Know-How and Patent Rights."
3. Under paragraph 4.1, PharmAthene is granted a world-wide non-exclusive license.
4. Paragraph 11.1 provides that, with some exceptions, "neither party shall be entitled to assign, transfer, change or in any way make over the benefit and/or burden of this Agreement without the prior written consent of the other."

Thus, under the License Agreement, PharmAthene was granted a non-exclusive license under the eight Lonza patents, and PharmAthene could not grant another party an interest in the patents without Biologics' prior consent.

PharmAthene's grant of a security interest in the eight Lonza Patents to MPM via the Patent Security Agreement (Exhibit B) was incorrect and/or improper and invalid, because, in the first place, the final paragraph of Section 2 of the Patent Security Agreement provides that the "Patent Collateral," in which the security interest is granted,

... shall not include any general intangibles or other rights arising under any contracts, instruments, licenses or other documents relating to any of the

foregoing Patent Collateral as to which the grant of a security interest would (i) constitute a violation of a valid and effective restriction in favor of a third party on such grant, unless and until any required consents shall have been obtained . . .

Since, under the provisions of paragraph 11.1 of the License Agreement (Exhibit A), PharmAthene was required to obtain Biologics' consent before granting a security interest in the eight Lonza Patents, and had not obtained such consent, the above-quoted language of the Patent Security Agreement excludes them from coverage under the agreement. The eight Lonza Patents therefore should not have been listed in the Schedule attached to the Patent Security Agreement.

Secondly, PharmAthene, as a non-exclusive licensee of the eight Lonza Patents, had no ownership rights in those patents and therefore had no power to grant a security interest in those patents to MPM.

Petitioner submits that under the circumstances the record of the Patent Security Agreement should be expunged from the Assignment Records of the USPTO. As discussed above, PharmAthene's purported granting of a security interest in the eight Lonza Patents was incorrect and/or improper and invalid. However, as the Assignment Records now stand, the recording of the Patent Security Agreement incorrectly indicates to the public that MPM has a security interest in the eight Lonza Patents, thereby casting a cloud on the title to those patents. The cloud should be removed by granting this petition and expunging the record of the Patent Security Agreement from the Assignment Records.

Accompanying this petition are the declarations of Gerry Kennedy, General Counsel of Biologics (Exhibit D), and Jordan P. Karp, Senior Vice President and General Counsel of PharmAthene (Exhibit E), together verifying the facts stated in this Petition. In addition, attention is particularly directed to paragraph 7 of Mr. Karp's petition, in which Mr. Karp acknowledges that no security interest was intended to be granted in the eight Lonza Patents; that PharmAthene had no right to grant a security interest in the eight Lonza Patents; and that the eight Lonza Patents should not have been listed in Schedule I of the Patent Security Agreement. Mr. Karp further states in paragraph 8 of his declaration that PharmAthene agrees

that the record of the Patent Security Agreement should be expunged from the Assignment Records of the USPTO.

Also submitted with this Petition as Exhibit F are copies of the Cover Sheet (Exhibit C) and of the Patent Security Agreement (Exhibit B), from which the eight Lonza Patents have been redacted.

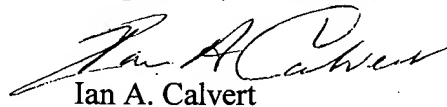
The corrective procedures outlined in MPEP 323.01(a) to 323.01(c) will not provide Petitioner with adequate relief, since the relief sought does not involve correcting a typographical error in the cover sheet or the recorded document, not does it involve correcting an improperly recorded assignment or name change. Moreover, as will be evident from the foregoing discussion, granting of the petition will not affect the integrity of the assignment records.

Conclusion

Petitioner submits that the right, title and interest which it possesses in the eight Lonza Patents has been clouded by the recordation of a Patent Security Agreement which incorrectly and improperly includes those patents. It is therefore respectfully requested that the record of that Agreement be expunged from the Assignment Records of the USPTO.

The Commissioner is authorized to charge any fees required for consideration of this Petition to Deposit Account No. 09-0528.

Respectfully submitted,



Ian A. Calvert

Registration No. 50,186

Stephen J. MacKenzie

Registration No. 51,980

Sept. 28, 2010

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(336) 721-3734 (Telephone)
(336) 726-6062 (Facsimile)

EXHIBIT A

LICENCE AGREEMENT

between


LONZA BIOLOGICS PLC

and

PHARMATHENE, INC.

B8578/AV/GK/22Aug05

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SCHEDULE

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|---|---------------|
| 1 | Patent Rights |
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THIS AGREEMENT is made the

23rd

day of

August

2005

BETWEEN

LONZA BIOLOGICS PLC of 228 Bath Road, Slough, Berkshire SL1 4DX, England (hereinafter referred to as "Biologics"), and

PHARMATHENE, INC., a Delaware corporation, of 175 Admiral Cochrane Drive, Suite 101, Annapolis, Maryland 21401 (hereinafter referred to as "Licensee")


WHEREAS

- A. Biologics is the proprietor of the System and has the right to grant certain Intellectual Property rights in relation thereto (all as hereinafter defined), and
- B. The Licensee has entered into a collaboration agreement with [REDACTED] under which [REDACTED] wishes to be able to supply certain elements of the System to the Licensee, and Licensee wishes to be able to use such elements of the System.
- C. The Licensee wishes to take a licence under Intellectual Property (as hereinafter defined) of which Biologics is the proprietor to commercially exploit the Product (as hereinafter defined) in the form hereunder.

NOW THEREFORE the parties hereby agree as follows:

1. Definitions

- 1.1 "Affiliate" means any company, corporation, limited liability company, partnership or other entity which directly or indirectly controls, is controlled by or is under common control, directly or indirectly, with the relevant party to this Agreement. "Control" means the ownership of more than fifty percent (50%) of the issued share capital of the party in question or the legal power to direct or cause the direction of the general management and policies of the party in question.

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- 1.3 "Competing Contract Manufacturer" shall mean any party who undertakes or performs more than fifty percent (50%) of their business as a third party manufacturer of monoclonal antibodies and/or therapeutic proteins or any product of a similar nature to which this Agreement relates.
- 1.4 "Effective Date" means the date first above written.
- 1.5 "First Commercial Sale" means the date of the first sale or other disposal of Product for consideration by the Licensee or its sublicensee.
- 1.6 "Intellectual Property" means System Know-How and Patent Rights.
- 1.7 "Know-How" means technical and other information, whether patented or unpatented, including, but without prejudice to the generality of the foregoing, ideas, concepts, trade secrets, know-how, inventions, discoveries, data, formulae, specifications, processes, procedures for experiments and tests and other protocols, results of experimentation and testing, fermentation and purification techniques and assay protocols.
- 1.8 "Net Selling Price" means all monies received by or on behalf of Licensee or its sublicensee hereunder in respect of the sale of Product in the Territory less the following items to the extent that they are paid or allowed and included in the invoice price, whether or not invoiced separately:
- 1.8.1 normal discounts actually granted, including without limitation, quantity, trade, cash and other discounts, rebates (including governmental rebates) and charge-backs;
 - 1.8.2 amounts refunded or credits allowed for Product;
 - 1.8.3 packaging, transportation and prepaid insurance charges on shipments or deliveries to customers; and

1.8.4 taxes, tariffs, customs duties, surcharges and other governmental charges actually incurred and paid by Licensee or its sublicensee hereunder in connection with the sale, exportation, importation or delivery of Product or other goods to customers.

Upon any sale or other disposal of Product by or on behalf of Licensee or its sublicensee hereunder that is not a bona fide arms length transaction or in which tangible consideration is received that is not money or upon any use of the Product for purposes which do not result in a disposal of such Product in consideration of sales revenue customary in the country of use, such sale, other disposal or use shall be deemed to constitute a sale at the then current maximum selling price in the country in which such sale, other disposal or use occurs.

For the avoidance of doubt, the supply of Product free of charge as commercial samples, or for use in clinical studies, or to third parties for evaluation purposes, shall not be included in this provision

For the purposes of the following sentence, "Combination Product" means any diagnostic or therapeutic product comprising Product and one or more other pharmaceutically active ingredient(s). In the event a Product is sold as part of a Combination Product, the Net Selling Price of the Product, for the purposes of determining royalty payments, shall be determined by multiplying the Net Selling Price of the Combination Product (as determined using the Net Selling Price definition), during the applicable royalty reporting period, by the fraction, $A/A+B$, where A is the average unit net sales price of the Product in the applicable country when sold separately in finished form and B is the average unit Net Selling Price in the same country of the other pharmaceutically active ingredient when sold separately in finished form, in each case during the applicable royalty reporting period or, if sales of both the Product, and the other pharmaceutically active ingredient did not occur in the same country in such period, then in the most recent royalty reporting period in which sales of both occurred, provided that such "recent royalty reporting period" shall not have been more than 24 months earlier. In the event that such average unit sale price cannot be determined for both the Product and the other pharmaceutically active ingredient(s) included in the Combination Product, Net Selling Price for the purposes of determining royalty

payments shall be calculated by multiplying the Net Selling Price of the Combination Product by the fraction of $C/C+D$ where C is the fair market value of the Product, and D is the fair market value of the other pharmaceutically active ingredient(s) included in the Combination Product. Licensee shall make a reasonable determination of such fair market values for purposes of its royalty reporting and payments and shall advise Biologics of its basis for such determination. Biologics shall have the right to review such Licensee determination and supporting data with respect to fair market value, and to notify Licensee if it disagrees with such determination. If Biologics does not agree with such determination, the parties shall negotiate in good faith as to such respective fair market values, and failing agreement, the matter shall be referred to an independent expert (acting as an expert and not as an arbitrator) to be appointed by agreement between Biologics and the Licensee or, in the absence of agreement, by the President for the time being of the Association of the British Pharmaceutical Industry. The costs of such independent expert shall be borne equally between Biologics and the Licensee. The decision of such independent expert shall be in writing and, save for manifest error on the face of the decision, shall be binding on both Biologics and the Licensee.

- 1.9 "Patent Rights" means the patents and applications, short particulars of which are set out in Schedule 1 hereto, and all patents and applications thereof of any kind throughout the world whether national or regional including but without prejudice to the generality of the foregoing, author certificates, inventor certificates, improvement patents, utility certificates and models and certificates of addition, and including any divisions, renewals, continuations, continuations in part, reissues, patent disclosures, improvements and extensions of reissue thereof.

1.10



- 1.11 "Strategic Partner" means a party with whom Licensee has entered into a contractual relationship, to identify a therapeutic target, collaborate in the

performance of research and development of a Product or a product of which the Strategic Partner is the Proprietor. In no event may any entity that is primarily a Competing Contract Manufacturer be deemed a Strategic Partner for the purposes of this Agreement. For the purposes of this Agreement, [REDACTED] shall be one such Strategic Partner of Licensee.

1.12



1.13 "System Know-How" means Know-How relating directly or indirectly to the System known to Biologics from time to time, of which Biologics is the proprietor.

1.14 "Territory" means world-wide.

1.15 "Valid Claim" means an existing unexpired claim within the Patent Rights (including any re-issued and unexpired patents) which has not been held unenforceable or invalid by the decision of a court or other governmental agency of competent jurisdiction unappealable or unappealed within the time allowed for appeal or been disclaimed, abandoned or cancelled, and which has not been admitted to be invalid or unenforceable through re-issue or disclaimer or otherwise.

1.16



2. Supply of the System and System Know-How

2.1. Biologics acknowledges and agrees that (i) Biologics and [REDACTED] have previously entered into that certain Research Evaluation Agreement, dated June 1, 1996, as amended, pursuant to which [REDACTED] has used the System to develop and make Product; (ii) upon signature of this Agreement, Licensee will be permitted to receive from [REDACTED] certain elements of the System, Product and the System Know-How; and (iii) Licensee does not have any requirement as of the Effective Date to receive the System from Biologics. Licensee shall not be permitted to receive from [REDACTED] any of the elements of the System without the prior written consent of Biologics, such consent not to be unreasonably withheld or delayed.

2.2 Licensee shall use the System only in the expression of Product by insertion of gene(s) coding for Product(s) into the System, and shall not use, cause the use of or permit to be used the System for any purpose not directly authorised by this Agreement.

3. Ownership of Property and Intellectual Property

3.1 It is hereby acknowledged and agreed that as between the parties any and all property and Intellectual Property in the System is vested in Biologics.

3.2 The provisions of this Clause 3 shall survive termination of this Agreement.

4. Licences

4.1 Biologics hereby grants to Licensee a world-wide non-exclusive licence (with the right to sublicense, subject to Clause 4.3 below) under the System Know-How and Patent Rights to use, develop, manufacture, have manufactured, market, sell, offer for sale, distribute, import and export Product in the Territory.

4.2 Save as expressly provided by Clause 2.2 above, the Licensee hereby undertakes not to make any modifications or adaptations to the System during the subsistence of this Agreement.

4.3 Subject to the provisions of this Clause 4.3, Licensee shall be entitled to grant a sublicense to the rights granted by Clause 4.1 to any one or more third parties for

the purposes of any such third party producing Product for Licensee, or in conjunction with the granting of rights in or to Product to a Strategic Partner or other third party, provided always:

4.3.1 Licensee shall ensure such sublicensee's use of the System and the Intellectual Property is undertaken solely for the purpose of establishing a manufacturing process for Product, or producing Product for Licensee, or for use, development, manufacture, having manufactured, marketing, selling, offering for sale, distributing, importing and exporting Product in the Territory as a sublicensee of Licensee; and

4.3.2 The sublicensee shall not, by virtue of this Agreement, be granted any right or licence, either express or implied, under any patent or proprietary right vested in Biologics or otherwise, to use the System, the Intellectual Property or the Product other than for the purposes of clause 4.3.1 and Licensee agrees to ensure that such sublicensee shall not assign, transfer, further sublicense or otherwise make over the benefit or the burden of the rights granted to it pursuant to this Agreement, except in conjunction with a license to sell Product; and

4.3.3 Any sublicense granted shall be expressly subject and subordinate to the terms of this Agreement, and it shall be Licensee's responsibility to ensure the strict adherence by any sublicensee hereunder to the terms and conditions of this Agreement; and

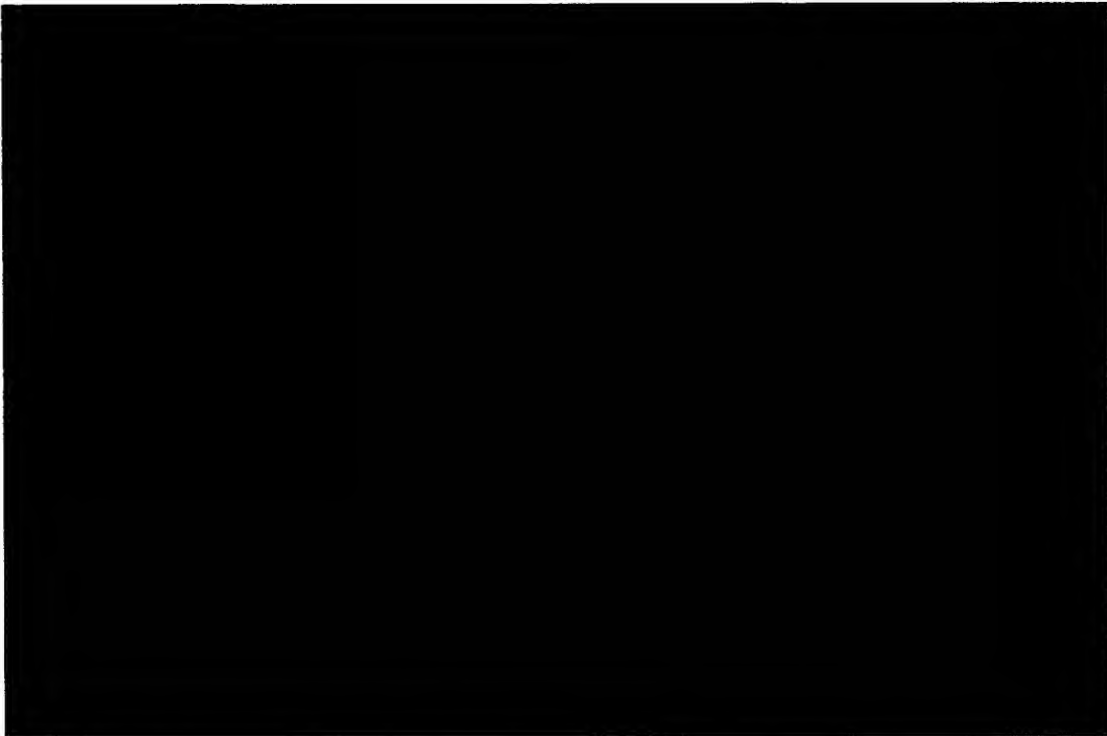
4.3.4 Prior to the grant of any sublicense pursuant to this Clause 4 Licensee shall obtain the written consent of Biologics (such consent not to be unreasonably withheld or delayed), to the grant of such sublicense. Biologics shall have the burden of establishing that the withholding of consent is not unreasonable. It shall be unreasonable to withhold consent because the sublicense is being granted to a competitor of Biologics or its Affiliate or any of their respective licensees. Biologics hereby consents to the granting of a sub-license hereunder to [REDACTED]

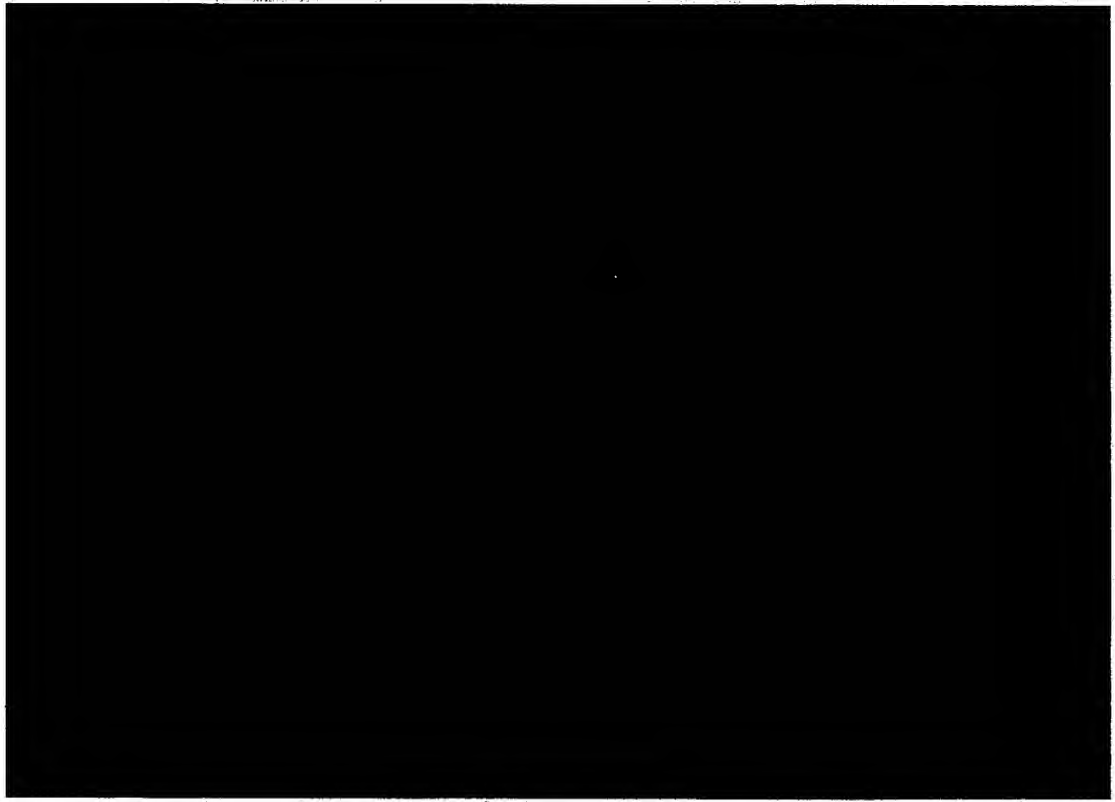
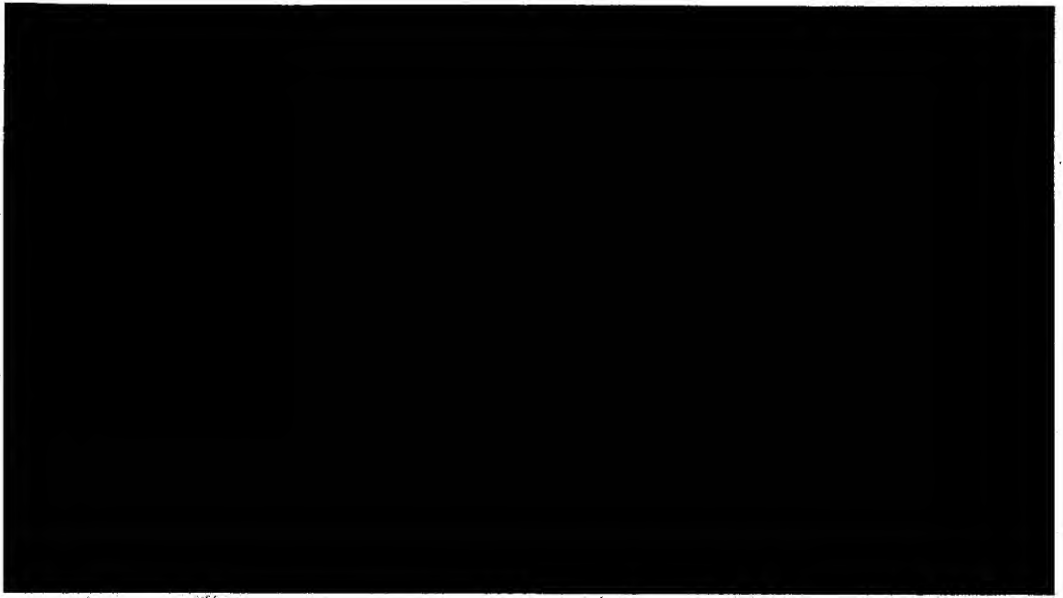
4.4 If, on a country-by-country basis, any granted patents that form part of the Patent Rights (including any re-issued patents and unexpired patents), subsequently

expire or no longer contain a Valid Claim such Patent Rights shall automatically fall outside the scope of this Agreement and the provisions of Clauses 4.1 to 4.3 shall only apply, with respect to granted patents, to those granted patents which contain a Valid Claim and form part of the Patents Rights for as long as those granted patents remain in force.

- 4.5 Notwithstanding clause 4.4, on a country-by-country basis, where no Valid Claims within the Patent Rights remain in force, the provisions of Clauses 4.1 to 4.3 shall only apply for as long as the System Know-How remains secret and substantial.

5. Payments

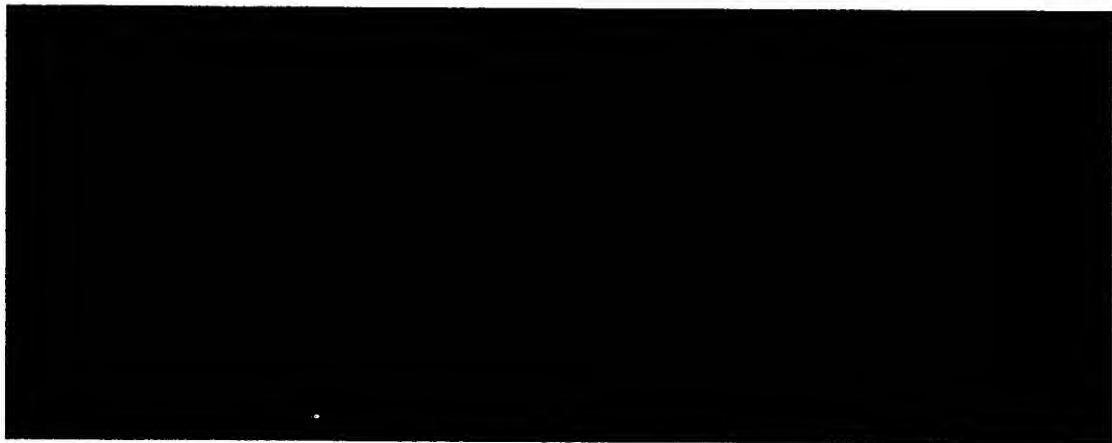
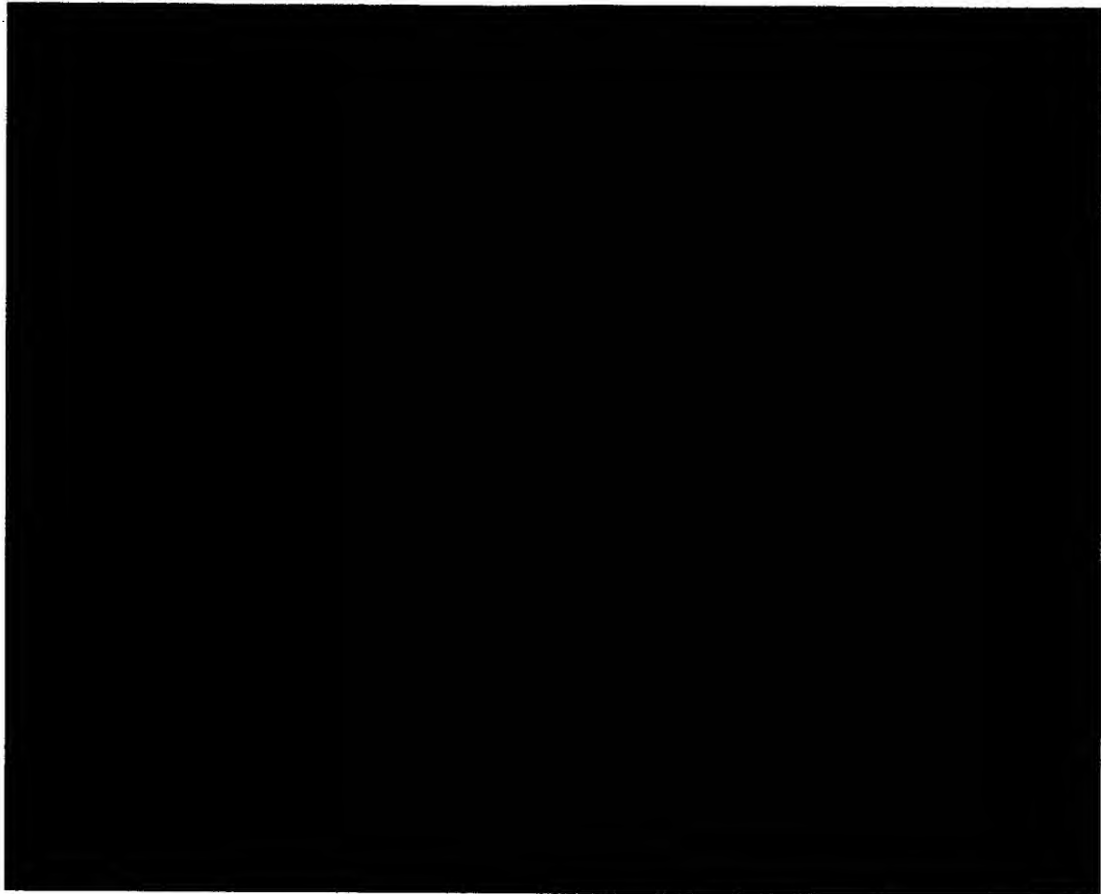




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6. Royalty Procedures





7. Liability and Warranties

- 7.1 Biologics gives no representation or warranty that the Patent Rights will be valid nor that the exercise of the rights granted to Licensee hereunder will not infringe other patent rights or intellectual property rights vested in Biologics or any third party.
- 7.2 Biologics warrants that (a) the patents included in the Patent Rights are the only patents that must be licensed in order to use the System, and (b) it has not received any suit or claim alleging that the Intellectual Property infringes the intellectual property rights of a third party.

- 7.3 The Licensee hereby acknowledges that in order to exploit the rights contained herein, other than the right to use the System, the Licensee may require licences under Biologics patent rights other than those herein licensed or under third party patent rights (including those vested in Affiliates of Biologics) that may be infringed by the use by the Licensee of the rights licensed herein and it is hereby agreed that it shall be the Licensee's responsibility to satisfy itself as to the need for such licences and if necessary to obtain such licences. No licence is granted save as expressly provided herein and no licence in addition thereto shall be deemed to have arisen or be implied by way of estoppel or otherwise.
- 7.4 Each Party ("Indemnifying Party") shall indemnify and hold harmless the other Party ("Indemnified Party") and its officers, servants and agents at all times in respect of any and all losses, damages, costs and expenses suffered or incurred as a result of any contractual, tortious or other claims or proceedings by third parties against Indemnified Party arising out of the Indemnifying Party's breach of this Agreement, including breach of representations and warranties, violation of applicable law, negligence or wilful misconduct.
- 7.5 With respect to product liability claims or proceedings, the following shall apply: (a) Except to the extent provided in (b) below, Licensee shall indemnify and hold harmless Biologics and its officers, servants and agents at all times in respect of any and all losses, damages, costs and expenses suffered or incurred as a result of any tortious claims or proceedings of death or bodily injury relating to the Product, and (b) Biologics shall indemnify and hold harmless Licensee and its officers, servants and agents at all times in respect of any and all losses, damages, costs and expenses suffered or incurred as a result of any tortious claims or proceedings of death or bodily injury relating to the Product to the extent such claims or proceedings result from defects in the System, or from Biologics breach of this Agreement.
- 7.6 With respect to indemnification under clauses 7.4 and 7.5, the Indemnified Party shall be defended at the Indemnifying Party's sole expense by counsel selected by Indemnifying Party and reasonably acceptable to the Indemnified Party, provided that the Indemnified Party may, at its own expense, also be represented by counsel of its own choosing. The Indemnifying Party shall have the sole right to control the defense of any such claim or action.

The Indemnifying Party's indemnification shall not apply to the extent that any losses are determined by final judgment to be attributable to the act or omission of the Indemnified Party.

The Indemnifying Party may settle any such claim, demand, action or other proceeding or otherwise consent to an adverse judgment (a) with prior written notice to the Indemnified Party but without the consent of the Indemnified Party where the only liability to the Indemnified Party is the payment of money and the Indemnifying Party makes such payment, or (b) in all other cases, only with the prior written consent of the Indemnified Party, such consent not to be unreasonably withheld.

The Indemnified Party shall notify the Indemnifying Party promptly of any claim, demand, action or other proceeding under clauses 7.4 or 7.5 and shall reasonably cooperate with all reasonable requests of the Indemnifying Party with respect thereto.

The Indemnified Party may not settle any such claim, demand, action or other proceeding or otherwise consent to an adverse judgment in any such action or other proceeding or make any admission as to liability or fault without the express written permission of the Indemnifying Party.

7.7 Any condition or warranty other than those relating to title which might otherwise be implied or incorporated within this Agreement by reason of statute or common law or otherwise is hereby expressly excluded.

7.8 The terms of this Clause 7 shall survive termination of the Agreement for whatever reason.

8. Confidentiality

8.1 Licensee expressly acknowledges that the System and any Know-How with which it is supplied by Biologics pursuant to this Agreement is supplied in circumstances imparting an obligation of confidence and Licensee agrees to keep such Know-How and System secret and confidential and to respect Biologics' proprietary

rights therein and to use the same for the sole purpose of this Agreement and not during the period of this Agreement or at any time for any reason whatsoever to disclose or permit to be disclosed such Know How or System to any third party other than its sublicensee hereunder for use in accordance with the terms of this Agreement and under an obligation of confidentiality essentially the same as that set forth in Clause 8.

8.2 Notwithstanding anything else to the contrary, where Licensee and/or its sublicensees are required by written demand from governmental agencies and regulatory authorities to disclose certain elements of the System to such governmental agencies and regulatory authorities or where Licensee and/or its sublicensee is required to disclose elements of the System to government agencies or regulatory authorities in connection with researching and/or developing and/or manufacturing and/or marketing and/or selling Product, Licensee and its sublicensees shall have the right to make such disclosures provided that Licensee or its sublicensees seek confidential treatment thereof. Licensee shall inform Biologics of any such demand from governmental agencies and regulatory authorities within three (3) business days.

8.3 Both parties undertake and agree not to at any time for any reason whatsoever disclose or permit to be disclosed to any third party or otherwise make use of or permit to be made use of any trade secrets or confidential information or materials relating to the business affairs or finances of the other or of any suppliers, agents, distributors, licensees or other customers of the other which comes into their possession pursuant to this Agreement.

8.4 The obligations of confidence referred to in this Clause 8 shall not extend to any information or material which the receiving party demonstrates:

8.4.1 is or shall become generally available to the public otherwise than by reason of a breach by the recipient party of such information of the provisions of this Clause 8;

8.4.2 is known to the recipient party of such information and is at its free disposal prior to its receipt from the other;

8.4.3 is subsequently disclosed to the recipient party without obligations of confidence by a third party owing no such obligation of confidentiality to the disclosing party; and

8.4.4 Biologics or Licensee may be required to disclose to a government agency for the purpose of any statutory, regulatory or similar legislative requirement applicable to the production of Product or to meet the requirements of any Stock Exchange to which the parties may be subject, but only to the extent such disclosure is required, and subject to obligations of secrecy wherever possible; and

8.4.5 can be demonstrated by competent written evidence as having been independently developed by the recipient of the information in question without access to or use or knowledge of the information of the disclosing party.

8.5 The obligations of both parties under this Clause 8 shall survive the expiry or termination of this Agreement for whatever reason until such time as the relevant information satisfies the conditions of clause 8.4.1 above.

9. Intellectual Property Enforcement

9.1 Biologics hereby undertakes and agrees that at its own cost and expense it will:

9.1.1 prosecute or procure prosecution of such of the Patent Rights which are patent applications diligently so as to secure the best commercial advantage obtainable, as determined by Biologics in its commercially reasonable discretion, and will pursue, as determined by Biologics in its commercially reasonable discretion, all necessary actions against any third party that Biologics reasonably believes is infringing, misappropriating or violating any Intellectual Property; and

9.1.2 pay or procure payment of all renewal fees in respect of the Patent Rights valid and subsisting for the full term thereof and in particular will procure such renewal of the registrations thereof as may be necessary from time

to time so far as it is reasonable to do so with particular reference to commercial considerations.

- 9.2 Licensee shall promptly notify Biologics in writing of any infringement or improper or unlawful use of or of any challenge to the validity of the Patent Rights and/or System Know-How. Biologics undertakes and agrees to take all such steps and proceedings and to do all other acts and things as may in Biologics' sole discretion be necessary to restrain any such infringement or improper or unlawful use or to defend such challenge to validity and Licensee shall permit Biologics to have the sole conduct of any such steps and proceedings including the right to settle them whether or not Licensee is a party to them. Licensee shall have the right at its own cost and for its own benefit to initiate, prosecute and control the enforcement of the Patent Rights against infringement by a Third Party in the Territory if all of the following conditions are fulfilled: (a) the product manufactured through the infringing activity is a competing product to the Product, (b) Biologics has not granted rights to third parties which prevent Biologics from granting such a right to enforce to Licensee, and (c) Biologics does not initiate proceedings within sixty (60) days of being requested to do so by Licensee.

10. Term and Termination

10.1



- 10.2 Licensee may terminate this Agreement by giving sixty (60) days notice in writing to Biologics.

- 10.3 Either Biologics or Licensee may terminate this Agreement forthwith by notice in writing to the other upon the occurrence of any of the following events:

- 10.3.1 if the other commits a material breach of this Agreement which in the case of a breach capable of remedy shall not have been remedied within thirty (30) days of the receipt by the other of a notice identifying the breach and requiring its remedy with it being understood that a payment breach shall be curable by making the payment within such thirty (30) day period.
- 10.3.2 if the other enters into compulsory or voluntary liquidation (other than for the purpose of effecting a reconstruction or amalgamation in such manner that the company resulting from such reconstruction or amalgamation if a different legal entity shall agree to be bound by and assume the obligations of the relevant party under this Agreement) or compounds with or convenes a meeting of its creditors or has a receiver appointed over all or any part of its assets or takes or suffers any similar action in consequence of a debt, or ceases for any reason to carry on business.
- 10.4 If at any time during this Agreement Licensee knowingly, directly or indirectly, opposes or assists any third party to oppose the grant of letters patent or any patent application within any of the Patent Rights or disputes or knowingly, directly or indirectly, assists any third party to dispute the validity of any patent within any of the Patent Rights or any of the claims thereof Biologics shall be entitled at any time thereafter to terminate all or any of the licences granted hereunder forthwith by notice to Licensee.
- 10.5 If this Agreement is terminated for any reason, other than by Licensee pursuant to Clause 10.3.1, any and all licences granted hereunder shall terminate with effect from the date of termination and Licensee shall destroy all Vectors, Cell Lines and Product forthwith and shall certify such destruction immediately thereafter in writing to Biologics.
- 10.6 Termination for whatever reason or expiration of this Agreement shall not affect the accrued rights of the parties arising in any way out of this Agreement as at the date of termination. The right to recover damages against the other and the provisions of clauses 10.3, 10.6, 10.7, 10.8 and all provisions which are expressed to survive this Agreement shall remain in full force and effect.

10.7 In the event that Licensee's licenses under this Agreement are terminated with respect to one or more countries, and a sublicense has been granted under this Agreement under any such license with respect to Product in any such country, then Biologics agrees to grant to each such sublicensee (other than an Affiliate of Licensee) a direct license to each such sublicensee under the terms and conditions of this Agreement.

10.8 Notwithstanding anything herein to the contrary, in the event of any termination or expiration of the term of this Agreement, Licensee shall have the right to use or sell Products on hand on the date of such termination or expiration and to complete Products in the process of manufacture at the time of such termination or expiration and use or sell the same, provided that Licensee shall submit the applicable royalty report, along with the royalty payments required by this Agreement.

11. Assignment

11.1 Save as expressly provided by Clause 4, neither party shall be entitled to assign, transfer, charge or in any way make over the benefit and/or the burden of this Agreement without the prior written consent of the other which consent shall not be unreasonably withheld or delayed, save that either party shall be entitled without the prior written consent of the other party to assign, transfer, charge, sub-contract, deal with or in any other manner make over the benefit and/or burden of this Agreement to an Affiliate or to any 50/50 joint venture company of which Biologics or Licensee, as the case may be, is the beneficial owner of fifty percent (50%) of the issued share capital thereof or to any company with which that party may merge or consolidate or to any company to which that party may transfer substantially all of its assets that relate to the business to which this Agreement is directed. No assignment shall be valid unless the assignee agrees to be bound by the terms and conditions of this Agreement. Biologics agrees not to assign or transfer the Patent Rights and/or the System Know-How to any person or entity without such person or entity agreeing that such Patent Rights and/or the System Know-How are subject to the terms and conditions of this Agreement.

11.2 This Agreement shall be binding upon the successors and assigns of the parties and the name of a party appearing herein shall be deemed to include the names of its successors and assigns provided always that nothing herein shall permit any assignment by either party except as expressly provided herein.

12. Governing Law and Jurisdiction

12.1 The validity, construction and performance of this Agreement shall be governed by English law to the jurisdiction of whose courts the parties hereto submit.

12.2 Either party shall have the right to take proceedings in any other jurisdiction for the purposes of enforcing a judgement or order obtained from the Court in England.

13. Force Majeure

Neither party shall be in breach of this Agreement if there is any total or partial failure of performance by it of its duties and obligations under this Agreement occasioned by any act of God, including without limitation, fire, act of government or state, war, civil commotion, insurrection, embargo, epidemic, terrorism or earthquake, prevention from or hindrance in obtaining any raw materials, energy or other supplies, labour disputes of whatever nature and any other reason beyond the control of either party. If either party is unable to perform its duties and obligations under this Agreement as a direct result of the effect of one of the reasons set out in this Clause 13 such party shall give written notice to the other of such inability stating the reason in question. The operation of this Agreement shall be suspended during the period (and only during the period) in which the reason continues. Forthwith upon the reason ceasing to exist the party relying upon it shall give written notice to the other of this fact. If the reason continues for a period of more than ninety (90) days and substantially affects the commercial basis of this Agreement the party not claiming under this Clause 13 shall have the right to terminate this Agreement by giving written notice of such termination to the other party.

14. Illegality

14.1 If any provision or term of this Agreement or any part thereof shall become or be declared illegal, invalid or unenforceable for any reason whatsoever including but

without limitation by reason of the provisions of any legislation or other provisions having the force of law or by reason of any decision of any Court or other body or authority having jurisdiction over the parties hereto or this Agreement including the EC Commission or the European Court of Justice:

- (i) such provision shall, so far as it is illegal, invalid or unenforceable, be given no effect by the Parties and shall be deemed not to be included in this Agreement;
- (ii) the other provisions of this Agreement shall be binding on the Parties as if such provision was not included therein; and
- (iii) the Parties agree to negotiate in good faith to amend such provision to the extent possible for incorporation herein in such reasonable manner as most closely achieves the intention of the Parties without rendering such provision invalid or unenforceable.

15. Miscellaneous

- 15.1 This Agreement embodies and sets forth the entire agreement and understanding of the parties and supersedes all prior oral and written agreements, understanding or arrangements relating to the subject matter of this Agreement. Neither party shall be entitled to rely on any agreement, understanding or arrangement which is not expressly set forth in this Agreement.
- 15.2 This Agreement shall not be amended, modified, varied or supplemented except in writing signed by duly authorised representatives of the parties.
- 15.3 No failure or delay on the part of either party hereto to exercise any right or remedy under this Agreement shall be construed or operated as a waiver thereof nor shall any single or partial exercise of any right or remedy under this Agreement preclude the exercise of any other right or remedy or preclude the further exercise of such right or remedy as the case may be. The rights and remedies provided in this Agreement are cumulative and are not exclusive of any rights or remedies provided by law.
- 15.4 Except as required by law, the text of any press release or other communication to be published by or in the media whether of a scientific nature or otherwise and

concerning this Agreement shall require the prior written approval of Biologics and Licensee.

15.5 Each of the parties hereto shall be responsible for its respective legal and other costs incurred in relation to the preparation of this Agreement.

15.6 The parties to this Agreement do not intend that any term hereof should be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999, or by any other statute or common-law principle, by any person who is not a party to this Agreement.

16. Notice

16.1 Any notice or other document to be given under this Agreement shall be in writing and shall be deemed to have been duly given if left at or sent by registered post or by a reputable overnight courier to a party or delivered in person to a party at the address set out below for such party or such other address as the party may from time to time designate by written notice to the other(s):

Address of Biologics

Lonza Biologics plc, 228 Bath Road, Slough, Berkshire SL1 4DX

Facsimile: 01753 777001

For the attention of the Head of Legal Services

Address of Licensee

PharmAthene, Inc.

175 Admiral Cochrane Drive, Suite 101

Annapolis, Maryland 21401

For the attention of CEO

16.2 All such notices and documents shall be in the English language. Any such notice or other document shall be deemed to have been received by the addressee seven (7) working days following the date of dispatch of the notice or other document by post or, where the notice or other document is sent by hand,

at the time of such delivery. To prove the giving of a notice or other document it shall be sufficient to show that it was dispatched.

17. Interpretation

17.1 The headings in this Agreement are inserted only for convenience and shall not affect the construction hereof.

17.2 Where appropriate words denoting a singular number only shall include the plural and vice versa.

17.3 Reference to any statute or statutory provision includes a reference to the statute or statutory provision as from time to time amended, extended or re-enacted.

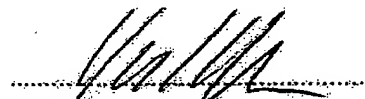
AS WITNESS the hands of the duly authorised representatives of the parties hereto

Signed for and on behalf of
LONZA BIOLOGICS PLC



 TITLE

Signed for and on behalf of
PharmAthene, Inc.



Eric L. Richman

VP Business Development & Strategic Planning

August 22, 2005

SCHEDULE 1

PATENT RIGHTS

Biologics Ref: LBP07 (formerly known as PA98)
Priority Dates: 01.04.85 and 03.09.85
Title: Transformed Myeloma Cell-Line and a Process for the Expression of a
Gene Coding for a Eukaryotic Polypeptide employing same
Inventors: John Henry Kenten
Michael Alan Boss

| <u>Territory</u> | <u>Patent Application or * Patent Number</u> | <u>Patent Expiry Date</u> |
|------------------|--|---------------------------|
| Australia | *584417 | 01.04.06 |
| Bulgaria | *60107 | 01.04.06 |
| Canada | *1319120 | 15.06.10 |
| Europe+ | *216846 | 01.04.06 |
| Russia | *2079553 | 01.04.06 |
| United Kingdom | *2183662 | 01.04.06 |
| USA (cont III) | *5981216 | 09.11.16 |

+ Includes Austria, Belgium, France, Germany, Italy, Luxembourg, Netherlands, Sweden and Switzerland.

Celltech Ref. No: PA 108

Subject Matter: Expression systems containing a glutamine synthetase gene

Title: Recombinant DNA Sequences, Vectors containing them and method for the use thereof

Origin: Celltech/University of Glasgow joint invention
 Registered Owner: Celltech Limited/University of Glasgow
 Beneficial Owner: Celltech R&D Limited/University of Glasgow

Priority Application Date: 23rd January 1986
 Earliest Publication Date/No: 30th July 1987/WO87/04462

| <u>Territory</u> | <u>Application Date</u> | <u>Application No.</u> | <u>Patent No.</u> | <u>Expiry Date</u> |
|------------------|-------------------------|------------------------|-------------------|--------------------|
| Australia | 23.01.87 | 68935/87 | 599081 | 23.01.07 |
| Canada | 23.01.87 | 528011 | 1338901 | 11.02.14 |
| *Europe | 23.01.87 | 87900856.3 | 0256055 | 23.01.07 |
| Japan | 23.01.87 | 500891/87 | 7032712 | 23.01.07 |
| USA | 23.01.87 | 07/595733 | 5122464 | 16.06.09 |
| USA (divisional) | 23.01.87 | 08/302241 | 5770359 | 16.06.09 |
| USA (divisional) | 23.01.87 | 08/476567 | 5827739 | 16.06.09 |

*includes: Austria, Belgium, France, Germany, Italy, Liechtenstein, Luxembourg, Netherlands, Sweden, Switzerland, United Kingdom

Biologics Ref: LBP09 (formerly known as PA 140)
Priority Date: 23.07.87
Title: Recombinant DNA Product and Processes using it
Inventors: Christopher Robert Bebbington

| <u>Territory</u> | <u>Patent Application or * Patent Number</u> | <u>Patent Expiry Date</u> |
|------------------|--|---------------------------|
| Europe+ | *323997 | 22.07.08 |
| Japan | *2505268 | 22.07.08 |
| USA (cont II) | *5591639 | 07.01.14 |
| USA (divisional) | *5658759 | 19.08.14 |

+ Includes Austria, Belgium, France, Germany, Italy, Luxembourg, Netherlands, Sweden, Switzerland and United Kingdom

Biologics Ref: LBP10 (formerly known as PA 177)
Priority Date: 18.04.88
Title: Recombinant DNA Methods, Vectors and Host Cells
Inventors: Christopher Robert Bebbington
Geoffrey Thomas Yarranton

| <u>Territory</u> | <u>Patent Application or * Patent Number</u> | <u>Patent Expiry Date</u> |
|------------------|--|---------------------------|
| Australia | *624616 | 18.04.09 |
| Canada | *1338891 | 04.02.14 |
| Europe+ | *338841 | 18.04.09 |
| Japan | *2007380 | 18.04.09 |
| USA (cont I) | *5879936 | 09.03.16 |
| USA (cont II) | *5891693 | 06.04.16 |

* includes Austria, Belgium, France, Germany, Greece, Italy, Luxembourg, Netherlands, Spain, Sweden, Switzerland and United Kingdom

EXHIBIT B

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Agreement"), dated as of May 5, 2006, is made between PharmAthene, Inc., a Delaware corporation (the "Company"), and MPM BioVentures III-QP, L.P., as administrative agent (together with its successor(s) thereto in such capacity, the "Administrative Agent") for each of the Secured Parties.

WITNESSETH:

WHEREAS, the Company, the Administrative Agent and certain Purchasers are parties to a Note Purchase Agreement, dated as of May 5, 2006 (as in effect from time to time, the "Note Purchase Agreement");

WHEREAS, in connection with the Note Purchase Agreement, the Company has executed and delivered a Security Agreement, dated as of May 5, 2006 (as in effect from time to time, the "Security Agreement");

WHEREAS, pursuant to the Security Agreement, the Company is required to execute and deliver this Agreement and to grant to the Administrative Agent a continuing security interest in all of the Patent Collateral (as defined below) to secure all Secured Obligations; and

WHEREAS, the Company has duly authorized the execution, delivery and performance of this Agreement; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in order to induce the Purchasers to enter into the Note Purchase Agreement, the Company agrees, for the benefit of each Secured Party, as follows:

Section 1. Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided in the Security Agreement.

Section 2. Grant of Security Interest. The Company hereby assigns, pledges, hypothecates, charges, mortgages, delivers, and transfers to the Administrative Agent, for the benefit of the Secured Parties, and hereby grants to the Administrative Agent, for the benefit of the Secured Parties, a continuing security interest in all of the following property, whether now or hereafter existing or acquired by the Company (the "Patent Collateral"):

(a) all of its letters patent and applications for letters patent throughout the world, including all patent applications in preparation for filing and each patent and patent application referred to in Item A of Schedule I attached hereto;

(b) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the items described in clause(a);

(c) all of its patent licenses, including each patent license referred to in Item B of Schedule I attached hereto; and

(d) all proceeds of, and rights associated with, the foregoing (including license royalties and proceeds of infringement suits), the right to sue third parties for past, present or future infringements of any patent or patent application, and for breach or enforcement of any patent license.

Notwithstanding the foregoing, "Patent Collateral" shall not include any general intangibles or other rights arising under any contracts, instruments, licenses or other documents relating to any of the foregoing Patent Collateral as to which the grant of a security interest would (i) constitute a violation of a valid and effective restriction in favor of a third party on such grant, unless and until any required consents shall have been obtained or (ii) give any other party to such contract, instrument, license or other document the right to terminate its obligations thereunder pursuant to any valid and effective provision thereof.


Section 3. Security Agreement. This Agreement has been executed and delivered by the Company for the purpose of registering the security interest of the Administrative Agent in the Patent Collateral with the United States Patent and Trademark Office and corresponding offices in other countries of the world. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to the Administrative Agent for the benefit of the Secured Parties under the Security Agreement. The Security Agreement (and all rights and remedies of the Administrative Agent and each Secured Party thereunder) shall remain in full force and effect in accordance with its terms.

Section 4. Acknowledgment. The Company does hereby further acknowledge and affirm that the rights and remedies of the Administrative Agent with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein.

Section 5. Counterparts. This Agreement may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement.

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

PHARMATHENE, INC.

By: 
Name: David P. Wright
Title: Chief Executive Officer and President

ADMINISTRATIVE AGENT:

MPM BIOVENTURES III-QP, L.P.

By: MPM Bio Ventures III GP, L.P., its General Partner
By: MPM BioVentures III LLC, its General Partner

By: _____
Name: Ansbort Gadicko
Title: Manager

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

PHARMATHENE, INC.

By: _____

Name:

Title:

ADMINISTRATIVE AGENT:

MPM BIOVENTURES III-QP, L.P.

By: MPM Bio Ventures III GP, L.P., its General Partner

By: MPM BioVentures III LLC, its General Partner

By: *Ansbert Gadick*

Name: Ansbert Gadicke

Title: Manager

SCHEDULE I - PATENTS

(including exclusive and non-exclusive licenses)

US PATENTS, PATENT RIGHTS AND PATENT APPLICATIONS:

Patents and patent applications for which PharmAthene has been granted a license from Exeter Life Sciences Inc. pursuant to a Patent License Agreement dated March 8, 2005:

Issued Granted Patents:

| Patent No. | Issue/Grant Date | Comments |
|-------------------|-------------------------|--|
| 6,252,133 | 6/26/2001 | At Board of Patent Appeals and Interferences – may be involved in interference (see below) |
| 6,525,243 | 2/25/2003 | At Board of Patent Appeals and Interferences – may be involved in interference (see below) |
| 6,147,276 | 11/14/2000 | |

SCHEDULE I - PATENTS (CONTINUED)

Pending Applications:

| App. No. | Pub No. | Pub. Date |
|------------|--------------------|---|
| 09/989,125 | 2002-0056149 A1 | 05/09/2002 |
| 09/989,128 | 2002-0124277 A1 | 09/05/2002 |
| 09/989,126 | 2002-0112254 A1 | 08/15/2002 – USPTO website indicates favorable decision by Board of Patent Appeals and Interferences issued 2/11/05 in interference. |
| 09/973,701 | 2003-0037352 A1 | 02/20/2003 – ABANDONED |
| 10/190,617 | 2003-0101468 A1 | 05/29/2003 |
| 10/234,854 | 2003-0106081 A1 | 06/05/2003 |

Patents and patent applications for which PharmAthene has been granted a license from Lonza Biologics PLC. pursuant to a License Agreement dated August 22, 2005:

Issued Granted Patents:

| Patent No. | Expiration Date |
|------------|-----------------|
| 5981216 | 11/9/2016 |
| 5122464 | 06/16/2009 |
| 5770359 | 06/23/2015 |
| 5827739 | 10/27/2015 |
| 5591639 | 01/07/2014 |
| 5658759 | 08/19/2014 |

SCHEDULE I PATENTS (CONTINUED)

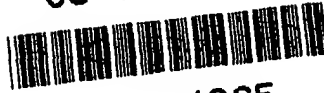
| Patent No. | Expiration Date |
|-------------------|------------------------|
| 5879936 | 03/09/2016 |
| 5891693 | 04/06/2016 |

Patent applications for which PharmAthene was granted a license from the Yissum Research Development Company, pursuant to a License Agreement dated December 22, 2005:

| App # | Patent # | App Date |
|--------------|-----------------|-----------------|
| 09/310638 | 6,987,211 | 5/12/1999 |

EXHIBIT C

08-01-2006



SHEET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Tab settings

To the Honorable Commissioner of

103284365

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

PharmAthene, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Date: 5/5/06

2. Name and address of receiving party(ies)

Name: MPM BioVentures III-QP, L.P.,

Internal Address: Administrative Agent

Street Address: 200 Clarendon Street

City: Boston State: MA ZIP: 02116

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

See Schedule I attached

B. Patent No.(s)

See Schedule I attached

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Judy Radoccia

Internal Address: Edwards Angell Palmer & Dodge

Street Address: 111 Huntington Avenue

City: Boston State: MA ZIP: 02199

6. Total number of applications and patents involved:

7. Total fee (37 CFR 3.41).....\$ 720.00

☒ Enclosed

☐ Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Judy Radoccia

Name of Person Signing
00000007.6252133

Signature

Date

Total number of pages including cover sheet, attachments, and document: 10

08/02/2006 DBYRNE

01 FC:8021

720.00 documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20221

**SCHEDULE I
TO
PATENT RECORDATION FORM COVER SHEET
PHARMATHENE, INC.**

PATENTS

| Patent No. | Issue/Grant Date |
|-------------------|-------------------------|
| 6,252,133 | 6/26/01 |
| 6,525,243 | 2/25/03 |
| 6,147,276 | 11/14/00 |
| 5,981,216 | 11/9/99 |
| 5,122,464 | 6/16/92 |
| 5,770,359 | 6/23/98 |
| 5,827,739 | 10/27/98 |
| 5,591,639 | 1/7/97 |
| 5,658,759 | 8/19/97 |
| 5,879,936 | 3/9/99 |
| 5,891,693 | 4/6/99 |
| 6,987,211 | 1/17/06 |

PATENT APPLICATIONS

| Patent Application No. | Publication No. | Publication Date |
|-------------------------------|------------------------|-------------------------|
| 09/989,125 | 2002-0056149 A1 | 5/9/02 |
| 09/989,128 | 2002-0124277 A1 | 9/5/02 |
| 09/989,126 | 2002-0112254 A1 | 8/15/02 |
| 09/973,701 | 2003-0037352 A1 | 2/20/03 |
| 10/190,617 | 2003-0101468 A1 | 5/29/03 |
| 10/234,854 | 2003-0106081 A1 | 6/5/03 |

EXHIBIT D

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

DECLARATION OF GERRY KENNEDY

I, Gerry Kennedy, hereby declare as follows:

1. I am the General Counsel of Lonza Biologics plc ("Biologics"), whose registered office is 228 Bath Road, Slough, SL1 4DX, United Kingdom. Lonza Biologics is a wholly-owned subsidiary of Lonza Group, AG.

2. This declaration is submitted in conjunction with a Petition To Expunge Assignment Record to be filed by Lonza Group, AG ("the Petition").

3. Lonza Group, AG, is the owner of the entire right, title and interest in and to the following U.S. Patents ("the eight Lonza Patents"):

5,122,464

5,591,639

5,658,759

5,770,359

5,827,739

5,879,936

5,891,693

5,981,216

4. On August 23, 2005, PharmAthene, Inc. ("PharmAthene") and Biologics entered into a License Agreement (Exhibit A of the Petition). Pursuant to paragraph 4.1 of the License Agreement, Biologics granted PharmAthene certain rights, including a non-exclusive license in the eight Lonza Patents.

4. Under the provisions of paragraph 3.1 of the License Agreement, PharmAthene acknowledges and agrees that Biologics is the owner of the eight Lonza Patents. Under the provisions of paragraph 11.1 of the License Agreement, PharmAthene has no right to assign or transfer an interest in the eight Lonza Patents without Biologics' prior written consent.

5. On August 1, 2006, a Patent Security Agreement (Exhibit B of the Petition) was filed with the USPTO Assignment Division for recording. In the Patent Security Agreement,

dated May 5, 2006, PharmAthene grants to MPM Bio Ventures III-QP, L.P. ("MPM") a security interest in the patents and patent applications referred to in the attached Schedule I. Among the patents referred to in Schedule I are the eight Lonza Patents. Also, the eight Lonza Patents, inter alia, are listed on the Cover Sheet (page 2 of Exhibit C of the Petition). The Patent Security Agreement was recorded in the USPTO at Reel 018132, Frames 0116-0124.

6. Biologics never gave its consent to PharmAthene's entry into the Patent Security Agreement. Therefore, pursuant to paragraph 11.1 of the License Agreement, PharmAthene had no right to enter into the Patent Security Agreement with respect to the eight Lonza Patents. In addition, PharmAthene, as a non-exclusive licensee of the eight Lonza Patents, had no ownership rights in those patents, and thus had no right to grant a security interest in them. Accordingly, the eight Lonza Patents should not have been listed in Schedule I of the Patent Security Agreement, and the inclusion of them in Schedule I was incorrect.

7. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine, or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

27 Sept. 2010
Date

Gerry Kennedy
Gerry Kennedy

EXHIBIT E

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

DECLARATION OF JORDAN P. KARP

I, Jordan P. Karp, hereby declare as follows:

1. I am the Senior Vice President and General Counsel of PharmAthene, Inc. ("PharmAthene"), whose address is One Park Place, Suite 450, Annapolis, MD 21401.
2. This declaration is submitted in conjunction with a Petition To Expunge Assignment Record to be filed by Lonza Group, AG ("the Petition").
3. On August 23, 2005, PharmAthene and Lonza Biologics PLC ("Biologics"), a subsidiary of Lonza Group, AG, entered into a License Agreement (Exhibit A of the Petition). Pursuant to paragraph 4.1 of the License Agreement, Biologics granted PharmAthene certain rights, including a non-exclusive license in the following U.S. Patents ("the eight Lonza Patents"):

5,122,464
5,591,639
5,658,759
5,770,359
5,827,739
5,879,936
5,891,693
5,981,216
4. Under the provisions of paragraph 3.1 of the License Agreement, PharmAthene acknowledges and agrees that Biologics is the owner of the eight Lonza Patents. Under the provisions of paragraph 11.1 of the License Agreement, PharmAthene has no right to assign or transfer the eight Lonza Patents without Biologics' prior written consent.
5. On May 5, 2006, PharmAthene and MPM Bio Ventures III-QP, L.P. ("MPM"), entered into a Patent Security Agreement (Exhibit B of the Petition), whereby PharmAthene granted MPM a security interest in the patents and patent applications referred to in the attached Schedule I. Among the patents referred to were the eight Lonza Patents.

6. MPM filed the Patent Security Agreement with the USPTO Assignment Division for recording on August 1, 2006, listing the eight Lonza Patents, inter alia, on the Cover Sheet (page 2 of Exhibit C of the Petition). The Patent Security Agreement was recorded at Reel 018132, Frames 0116-0124.

7. Since Biologics never gave its consent to PharmAthene's entry into the Patent Security Agreement, PharmAthene had no right to enter into the Agreement with respect to the eight Lonza Patents. The eight Lonza Patents were excluded from the Patent Security Agreement by virtue of the last paragraph of Section 2 of the Agreement, and no security interest in those patents was intended to be granted. Moreover, PharmAthene, as a non-exclusive licensee of the eight Lonza Patents, had no ownership rights in those patents, and thus had no right to grant a security interest in them. Accordingly, the eight Lonza Patents should not have been listed in Schedule I of the Patent Security Agreement, and the inclusion of them in Schedule I was incorrect.

8. PharmAthene agrees that the record of the Patent Security Agreement should be expunged from the Assignment Records of the USPTO.

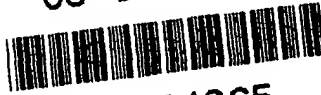
9. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine, or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Sept. 27, 2010
Date

Jordan Karp
Jordan P. Karp

EXHIBIT F

08-01-2006



SHEET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Tab settings ☐ ☐ ☐ ☐ ☐

To the Honorable Commissioner of

103284365

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

PharmAthene, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment

☐ Merger

☒ Security Agreement

☐ Change of Name

☐ Other _____

Execution Date: 5/5/06

2. Name and address of receiving party(ies)

Name: MPM BioVentures III-QP, L.P.,

Internal Address: AS Administrative Agent

Street Address: 200 Clarendon Street

City: Boston State: MA ZIP: 02116

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

See Schedule I attached

B. Patent No.(s)

See Schedule I attached

Additional numbers attached? ☐ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Judy Radoccia

Internal Address: Edwards Angell Palmer & Dodge

Street Address: 111 Huntington Avenue

City: Boston State: MA ZIP: 02199

6. Total number of applications and patents involved:

7. Total fee (37 CFR 3.41).....\$ 720.00

☒ Enclosed

☐ Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Judy Radoccia

Name of Person Signing

Signature

Date

08/02/2006 DBYRME 00000007.6252133

Total number of pages including cover sheet, attachments, and document: 10

01 FC:8021

720.00 documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20221

PATENT

REEL: 018132 FRAME: 0116

**SCHEDULE I
TO
PATENT RECORDATION FORM COVER SHEET
PHARMATHENE, INC.**

PATENTS

| Patent No. | Issue/Grant Date |
|-------------------|-------------------------|
| 6,252,133 | 6/26/01 |
| 6,525,243 | 2/25/03 |
| 6,147,276 | 11/14/00 |
| [REDACTED] | |
| [REDACTED] | |
| [REDACTED] | |
| [REDACTED] | |
| [REDACTED] | |
| [REDACTED] | |
| 6,987,211 | 1/17/06 |

PATENT APPLICATIONS

| Patent Application No. | Publication No. | Publication Date |
|-------------------------------|------------------------|-------------------------|
| 09/989,125 | 2002-0056149 A1 | 5/9/02 |
| 09/989,128 | 2002-0124277 A1 | 9/5/02 |
| 09/989,126 | 2002-0112254 A1 | 8/15/02 |
| 09/973,701 | 2003-0037352 A1 | 2/20/03 |
| 10/190,617 | 2003-0101468 A1 | 5/29/03 |
| 10/234,854 | 2003-0106081 A1 | 6/5/03 |

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Agreement"), dated as of May 5, 2006, is made between PharmAthene, Inc., a Delaware corporation (the "Company"), and MPM BioVentures III-QP, L.P., as administrative agent (together with its successor(s) thereto in such capacity, the "Administrative Agent") for each of the Secured Parties.

WITNESSETH:

WHEREAS, the Company, the Administrative Agent and certain Purchasers are parties to a Note Purchase Agreement, dated as of May 5, 2006 (as in effect from time to time, the "Note Purchase Agreement");

WHEREAS, in connection with the Note Purchase Agreement, the Company has executed and delivered a Security Agreement, dated as of May 5, 2006 (as in effect from time to time, the "Security Agreement");

WHEREAS, pursuant to the Security Agreement, the Company is required to execute and deliver this Agreement and to grant to the Administrative Agent a continuing security interest in all of the Patent Collateral (as defined below) to secure all Secured Obligations; and

WHEREAS, the Company has duly authorized the execution, delivery and performance of this Agreement; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in order to induce the Purchasers to enter into the Note Purchase Agreement, the Company agrees, for the benefit of each Secured Party, as follows:

Section 1. Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided in the Security Agreement.

Section 2. Grant of Security Interest. The Company hereby assigns, pledges, hypothecates, charges, mortgages, delivers, and transfers to the Administrative Agent, for the benefit of the Secured Parties, and hereby grants to the Administrative Agent, for the benefit of the Secured Parties, a continuing security interest in all of the following property, whether now or hereafter existing or acquired by the Company (the "Patent Collateral"):

(a) all of its letters patent and applications for letters patent throughout the world, including all patent applications in preparation for filing and each patent and patent application referred to in Item A of Schedule I attached hereto;

(b) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the items described in clause(a);

(c) all of its patent licenses, including each patent license referred to in Item B of Schedule I attached hereto; and

(d) all proceeds of, and rights associated with, the foregoing (including license royalties and proceeds of infringement suits), the right to sue third parties for past, present or future infringements of any patent or patent application, and for breach or enforcement of any patent license.

Notwithstanding the foregoing, "Patent Collateral" shall not include any general intangibles or other rights arising under any contracts, instruments, licenses or other documents relating to any of the foregoing Patent Collateral as to which the grant of a security interest would (i) constitute a violation of a valid and effective restriction in favor of a third party on such grant, unless and until any required consents shall have been obtained or (ii) give any other party to such contract, instrument, license or other document the right to terminate its obligations thereunder pursuant to any valid and effective provision thereof.

Section 3. Security Agreement. This Agreement has been executed and delivered by the Company for the purpose of registering the security interest of the Administrative Agent in the Patent Collateral with the United States Patent and Trademark Office and corresponding offices in other countries of the world. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to the Administrative Agent for the benefit of the Secured Parties under the Security Agreement. The Security Agreement (and all rights and remedies of the Administrative Agent and each Secured Party thereunder) shall remain in full force and effect in accordance with its terms.

Section 4. Acknowledgment. The Company does hereby further acknowledge and affirm that the rights and remedies of the Administrative Agent with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein.

Section 5. Counterparts. This Agreement may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement.

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

PHARMATHENE, INC.

By: 
Name: David P. Wright
Title: Chief Executive Officer and President

ADMINISTRATIVE AGENT:

MPM BIOVENTURES III-QP, L.P.

By: MPM Bio Ventures III GP, L.P., its General Partner
By: MPM Bio Ventures III LLC, its General Partner

By: _____
Name: Ansbert Gadicko
Title: Manager

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.


PHARMATHENE, INC.

By: _____
Name:
Title:

ADMINISTRATIVE AGENT:

MPM BIOVENTURES III-QP, L.P.

By: MPM Bio Ventures III GP, L.P., its General Partner
By: MPM BioVentures III LLC, its General Partner

By: 
Name: Ansbert Gadicke
Title: Manager

SCHEDULE I - PATENTS

(including exclusive and non-exclusive licenses)

US PATENTS, PATENT RIGHTS AND PATENT APPLICATIONS:

Patents and patent applications for which PharmAthene has been granted a license from Exeter Life Sciences Inc. pursuant to a Patent License Agreement dated March 8, 2005:

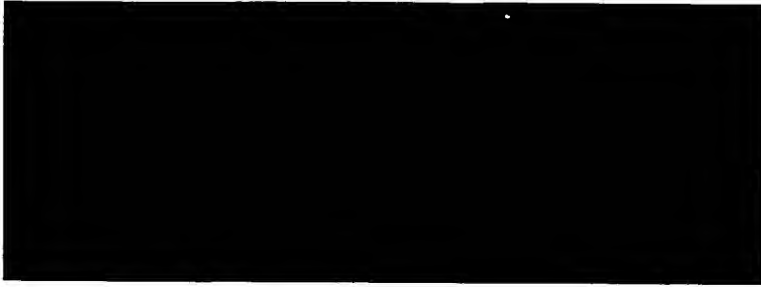
Issued Granted Patents:

| Patent No. | Issue/Grant Date | Comments |
|-------------------|-------------------------|--|
| 6,252,133 | 6/26/2001 | At Board of Patent Appeals and Interferences – may be involved in interference (see below) |
| 6,525,243 | 2/25/2003 | At Board of Patent Appeals and Interferences – may be involved in interference (see below) |
| 6,147,276 | 11/14/2000 | |

SCHEDULE I - PATENTS (CONTINUED)**Pending Applications:**

| App. No. | Pub No. | Pub. Date |
|-----------------|--------------------|---|
| 09/989,125 | 2002-0056149 A1 | 05/09/2002 |
| 09/989,128 | 2002-0124277 A1 | 09/05/2002 |
| 09/989,126 | 2002-0112254 A1 | 08/15/2002 – USPTO website indicates favorable decision by Board of Patent Appeals and Interferences issued 2/11/05 in interference. |
| 09/973,701 | 2003-0037352 A1 | 02/20/2003 – ABANDONED |
| 10/190,617 | 2003-0101468 A1 | 05/29/2003 |
| 10/234,854 | 2003-0106081 A1 | 06/05/2003 |

SCHEDULE I PATENTS (CONTINUED)



Patent applications for which PharmAthene was granted a license from the Yissum Research Development Company, pursuant to a License Agreement dated December 22, 2005:

| App # | Patent # | App Date |
|--------------|-----------------|-----------------|
| 09/310638 | 6,987,211 | 5/12/1999 |